

## 1.4: Graphs and Graphing Utilities

As graphing calculators are *not* required for this course, we will use Desmos:

[desmos.com/calculator](https://www.desmos.com/calculator)

**Example.** For a certain city, the cost  $C$  of obtaining drinking water with  $p$  percent impurities (by volume) is given by

$$C = \frac{120,000}{p} - 1200$$

The equation for  $C$  requires that  $p \neq 0$ , and because  $p$  is the percent impurities, we know  $0 < p \leq 100$ . Use the restriction on  $p$  and a graphing calculator to obtain an accurate graph of the equation.

